

Engaging with Methodological Issues in Qualitative Research: Sharing Personal Experience to Benefit Novice Researchers

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Abstract

In Ghana and many African countries, students in tertiary education institutions are less familiar with qualitative research methodologies, despite the legion literature on this subject and its popularity in western higher education institutions. In this paper, I share my experience on how I engaged with methodological issues in a qualitative study which I conducted. The paper seeks to demonstrate that despite the apparently messy nature of qualitative research, its characteristics, principles and defining canons are translatable from theory to practice, from rhetoric to reality, and from the pages of textbooks to the pragmatics of research. The paper aims to provide insights to novice researchers who have interest in qualitative research methodologies but feel hesitant to apply them. Hopefully, the fears of such researchers would be allayed and they would be emboldened to venture into this exciting and excellent area of research.

Keywords: Credibility, positivism, post-positivism, qualitative research, research paradigm,

1. Introduction

It used to be that for many people research meant isolating the variables that one studied from the rest of the world. Researchers set up some kind of experiment where they changed the independent variable and then recorded what kind of change happened to the dependent variable. This kind of research approach has worked alright with physical science fields such as physics and chemistry and, to some extent, with the study of human behavior, to which the approach was extended some years later. However, some social scientists, especially anthropologists, made excellent criticisms of this type of research. For them, human behavior cannot be realistically studied out of social context, and what you find scientifically depends on your frame of reference. They proposed that if you want to study some people you should try to discover the meaning from their point of view. This thinking gave birth to qualitative research which is often distinguished from quantitative research.

Drawing from a long history in anthropology, sociology and clinical psychology, qualitative research is predicated on the notion that meaning is socially constructed by individuals in interaction with their world. Reality is, therefore, not single but multiple, not fixed but changeable over time, and not universal but context-specific (Merriam, 2002; Vidich & Lyman, 2003). Based on this premise, qualitative researchers have a common interest in understanding what people's constructions and interpretations of their world and experiences are at a particular point in time and in a particular context (Merriam, 2002).

As defined by Bogdan and Biklen (2003, pp. 3-7), qualitative research has a preference for 'natural' settings as the primary source of data; aims at an accurate and rich description and explanation of phenomenon with a view to understanding it from the perspectives of participants; uses an inductivist methodology which avoids the *a priori* formulation and premature testing of hypotheses; and has a concern with the process of arriving at (rather than preoccupation with only) outcomes. In addition, the qualitative researcher is the primary instrument for data collection and analysis. This human-as-instrument (Lincoln & Guba, 1985) is sensitive and responsive to the total context in which he or she gathers data personally, adapts techniques to the circumstances, and generates meaning from the data collected. Typically, findings inductively derived from data take the form of themes, categories, typologies, concepts, tentative hypotheses, and even substantive theory (Crotty, 1998; Merriam, 1998, 2002).

There are different types (sometimes called research traditions) of qualitative research, each with its distinctive emphasis and shaped by different epistemological origins, philosophies about the nature of scientific inquiry and its outcomes and varying prescriptions for methodological rigor. For example, ethnography tries to understand the interaction of individuals not just with others, but with the *culture* of the society in which they live (Merriam, 2002) through immersion in their community; phenomenology seeks to understand the 'constructs' people use in everyday life to make sense of the world by uncovering the *essence* or underlying structure of an experience

(Patton, 2002); symbolic interactionism explores behaviour and social roles to understand how people interpret and react to their environment; narrative inquiry has a special concern for the *stories* of participants (Clandinin & Connelly, 2000); and grounded theory aims to develop ‘emergent’ substantive, localized theories of social action derived inductively through the identification of analytical categories and the relationships between them (Glaser & Strauss, 1967).

In Ghana and many African countries, students in tertiary education institutions are less familiar with qualitative research methodologies, despite the legion literature on this subject and its popularity in western higher education institutions. In this paper, I share my experience on how I engaged with methodological issues in a qualitative study which I conducted about a decade ago and published four years later (see Cobbold, 2010). Using excerpts from the study, hereinafter called *illustrative study*, I explain the particular methodological decisions I made in investigating the study problem in light of the context in which it was located, and how the issues which surfaced in the data collection processes were handled. In general, the paper addresses the *method* and *self* criteria (Lincoln & Guba, 1985) which parallel two of the credibility criteria for qualitative inquiry suggested by Patton (2002). That is, rigor in the use of techniques and methods for gathering high quality data that are carefully analyzed, and the credibility of the researcher. In practice, the two are intertwined.

The paper aims to demonstrate that despite the apparently messy nature of qualitative research, its characteristics, principles and defining canons are translatable from theory to practice, from rhetoric to reality, and from the pages of textbooks to the pragmatics of research. Before addressing these issues, a brief description of the illustrative study to provide a relevant context for the discussion would seem to be in order.

2. The Illustrative Study

The study was a basic interpretive qualitative research (Merriam, 2002). Sharing the common features of all qualitative research, interpretive qualitative studies focus especially on “how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences” (Merriam, 2002, p. 38). It takes the view that the social world is not governed by law-like regularities but it is mediated through meaning and human urgency; consequently the social researcher is concerned to explore and understand the social world using both the participant’s and the researcher’s understandings. The overall purpose is to understand how people make sense of their lives and their experiences (Merriam, 2002). Understanding the subjective meaning of people’s experiences involves what Schwandt (2003) terms “empathic identification,” that is, “putting oneself in the place of the other and seeing things from the perspective of others” (Crotty, 1998, p. 76).

Using an interpretive lens, I investigated teacher retention policies in Ghana. In conceptualizing the study, I saw the reality about teacher retention policies not fixed ‘out there;’ it is constructed by understanding the meaning, perceptions and perspectives that people who make and implement the policies, and those who are the target of such policies, attribute to their experiences of the policies. It is by this process that knowledge about the world, in this case the world of teacher education policy, is produced (Merriam, 1998).

In interpretivism, the researcher and the social world impact on each other. Facts and values are not distinct and findings are inevitably influenced by the researcher’s perspectives and values, thus making it impossible to conduct an objective, value-free research, although the researcher can declare and be transparent about his or her assumptions (Ritchie & Lewis, 2003). Four assumptions underpinned my study:

- Whatever a person’s reasons for choosing an occupation, the probability that he/she would remain in that occupation is contingent on the motivation given them.
- Effective motivation which addresses both the professional and non-professional needs of employees can counteract other factors which might act on them to consider leaving their job.
- Approaches to solving staff shortage problems which aim at attracting and retaining employees at the same time are more likely to succeed. Whereas what people are offered before entry into an occupation may not necessarily retain them, what they can enjoy after entry can both attract and retain them.
- The nature, direction and success of any policy initiative can be constructed through interpretation of the perspectives of the policy makers and implementers as well as the perceptions of the people who are the object of that policy. This assumption reflects my basic belief about the nature of reality which is represented by the ontological, epistemological, and methodological positions of the qualitative research paradigm (Guba & Lincoln, 2003).

3. Self-Positioning

“Academic texts that deny the personal voice and create an illusion of neutrality hurt the pursuit of truth. Stories that contain the personal are good theory” (Bochner, 1997, p. 418). Therefore, qualitative researchers (e.g. Clandinin & Connelly, 2000) often weave their personal histories and experiences into the wider fabric of their writings. In the opening paragraph of the illustrative study, I followed in this practice. I explained my educational background and recounted my professional experiences, especially my involvement with teachers and issues that impact on their lives and work, as well as my regular engagement with members of the education bureaucracy. To be specific, I wrote:

My previous experience as teacher, a teacher educator and my interaction with the top hierarchy of the MOE [Ministry of Education] have all combined to shape my interest and thinking about teachers and their lives, particularly, issues that frame teachers’ effectiveness and tenure... my “insider” status...gives me potential advantage in terms of data collection and the perspectives I bring into the analysis and interpretation of the data. This study, thus, marries my prior interest and experience as well as my desire to help solve a problem that is of both national and international concern (Cobbold, 2010, p. 1).

This self-positioning by qualitative researchers in relation to the contexts they study and with their participants, is done in the conviction that it may “highlight specific aspects of the phenomena investigated, bring new dimensions forward, contributing to a multiperspectival construction of knowledge” (Kvale, 1996, p.286). At the same time it alerts the researcher to the ethics of involvement and the borders of subjectivity (Fine, 1998).

4. Methodological Positioning

In the midst of the burgeoning literature on research paradigms or methodologies, a research student often faces the hard decision of choosing the appropriate process of inquiry to investigate a clearly defined problem. The decision is not merely one of selecting from the simplistic quantitative-qualitative dichotomy but, more importantly, of locating methodological choices within the relevant philosophical framework. Different philosophical orientations are discussed: post-positivism, constructionism (often combined or used interchangeably with interpretivism), transformivism, pragmatism (Mertens, 2005); and post-structuralism and postmodernism (Lather, 1992). These perspectives represent different epistemological positions; that is, claims about what is knowledge, how we know it, what values go into it, how we write about it, and the processes for studying it (Creswell, 2003, p. 6). Associated with each of these philosophical perspectives are numerous apparently confusing labels, sometimes used synonymously with the broad paradigmatic categories, and at other times regarded as methods or strategies within the paradigms (see Denzin & Lincoln, 2000; Lather, 1992; Lancy, 1993; Lincoln & Guba, 2003; Merriam, 1998; Patton, 2002; Tesch, 1990). A further problem arises when one observes that:

There are a variety of viewpoints as to the importance of linking methodological choices to philosophical paradigms. Leaders in the field do not agree as to the need to acknowledge an underlying paradigm, nor do they agree on the role that such paradigms serve in the research process (Mertens, 2005, p. 6).

Patton (2002, p. 69), for example, thinks that such “deep epistemological reflection and philosophical study” is needless and can be obstructive to the entire research process. But others believe that it is unavoidable (Schwandt, 2003) and that “*doing so is very important*” (Mertens 2005, p. 6; emphasis in original) because it represents a choice between hegemony and liberation (Ladson-Billings, 2003).

In the initial design of a study, research students often find themselves entangled in this war of “methodological orthodoxy, superiority, and purity” versus “methodological appropriateness, pragmatism, and mutual respect” (Patton, 2002, p.68), as they survey the procedural options available for addressing their research problem. In the illustrative study which investigated the articulation between policy and practice with respect to teacher retention in Ghana, I recounted my struggle in this dilemma of methodological enigma. Listen to my first consideration:

Within a positivist frame work, I could have hypothesized a mismatch between teacher retention policies as intended and as practiced, and used both open- and closed-ended questionnaire to elicit the views of teachers, education officers or both, and employed statistical tools to make inferences. I would then have operated on the assumptions that ‘reality’ is stable, observable and measurable and that knowledge is developed through careful observation and measurement of the objective reality that exists “out there” in the world....My

emphasis would have been on the testing of hypotheses, constituted of variables assumed to represent the ideas and feelings of participants. Such deterministic and reductionistic approach...would have downplayed the more important meanings behind the responses of the participants (Cobbold, 2010, pp. 95-96).

My second line of thought presented two options: (1) focus on the policy and structure of teacher education and training in Ghana which allow certificate qualifications for teaching at the basic school level as compared to degree qualification at the secondary level, making teachers at the former level feel inferior and discontented and eventually leaving teaching after obtaining degree qualification; and (2) analyze government development policy which had tended to concentrate on urban areas and neglected rural areas, making life in rural communities uncomfortable for teachers to stay. These two choices reflect a critical theory stance of the transformative paradigm. The outcome of the study would have been “an ideological critique of power, privilege, and oppression in areas of educational [policy and] practice” (Merriam, 1998, p. 4), with a consequent action agenda for reform that may change the lives of the teachers, the communities and schools in which they live or work, and perhaps my own life as teacher educator and researcher. Hear how I resolved the issue through my methodological positioning:

In this study, I have wrestled with the methodological dilemmas, and adopted an approach which positions my research within the ‘enlightenment’ model of educational research....This model, in explaining the relationship between educational research and education policy, has a bias towards qualitative research and assumes the policy process to be interactive and iterative, involving multiple (and competing) values, interests and interpretations (Cobbold, 2010, p. 96).

This methodological positioning was also informed by the nature of my research questions and the data needed to answer or illuminate them, my personal attributes and the knowledge, skills and attitudes required for the research (Creswell, 2003; Merriam, 1998; Patton, 2002). It needs pointing out that the methodological stance that qualitative researchers take when conducting a study is not absolute, permanent and exclusive but relative to the particular study in question and oftentimes inclusive and integrative. So in the illustrative study I warned:

However, the reader may well note that the methodological posture adopted in this study...represents not an entrenched position but my “functional paradigm” (Mertens, 2005). Therefore, facets of other worldviews detected in the study (and this is highly inevitable) should be seen as my sympathies for “methodological enlightenment and tolerance” (Patton, 2002, p. 68). I am not alone in this belief. Lincoln and Guba (2003) who identify as social constructivists, admit that their own work within that paradigm is influenced by facets of the transformative orientation (Cobbold, 2010, p. 97).

5. Purpose Statement

According to Creswell (2003), the purpose statement is the most important statement in a research study. As the controlling idea in an entire study, the purpose statement points the reader to the central intent of the study. It indicates “why you want to do the study and what you intend to accomplish” (Locke, Spirduso & Silverman, 2000, p. 9). It is customary to find some researchers write the purpose statement into the introductions to their paper, especially in journal articles, where it is either referred to within the context of the research question and objective or framed as an aspect of the research problem (Creswell, 2003). Other researchers prefer to separate the purpose statement as a stand-alone section, especially in dissertations and dissertation proposals to signify its importance. This is also the stance preferred by Creswell who argues for a clear distinction between the purpose of the study, the problem in the study and the research questions. He explains:

The purpose sets forth the intent of the study and not the problem or issue leading to a need for the study...The purpose is also not the research questions – those questions that the data collection will attempt to answer...Instead, the purpose sets the objectives, the intent, and the major idea of a proposal or a study. This idea builds on a need (the problem) and is refined into specific questions (the research questions) (Creswell, 2003, p. 88).

In qualitative research, the purpose statement focuses on a single phenomenon to be explored or understood; uses action verbs to convey how learning will take place, the open nature of the inquiry and its emerging design; usually (though not always) intimates the strategy of inquiry to be used in data collection, analysis and the process of research; mentions the participants in the study, and identifies the site for the research (Creswell, 2003,

pp. 89-90). Back to the illustrative study, the statement of the purpose of the study exemplifies most of the foregoing characteristics. These are indicated by the words in italics and explained in parenthesis:

The purpose of this study is to *explore* (how learning will take place) how *teacher retention policy* (phenomenon to be understood) has become practice in the *Ghana* (site for the research) school system. In general, it is a *heuristic study* (strategy of inquiry) of the articulation between policy and practice. Specifically, I seek to understand the nature of retention policies and their fit with the procedures used to implement them; and to gauge the potential impact of retention policies in addressing the needs of teachers and reduce attrition by investigating the *teachers'* (participants) perceptions and career intentions. The ultimate aim is to provide insights for informing policy directed at retaining qualified and experienced teachers in Ghana's basic schools (Cobbold, 2010, pp. 7-8).

6. Research Questions

In qualitative study, researchers state research questions rather than objectives or hypotheses. Creswell (2003) identifies two forms of research questions in qualitative research: (1) a central question (could be two or more) which states the question being examined in the study in its most general form and (2) associated sub-questions which narrow the focus of the study but leave open the questioning. In general, qualitative researchers ask "what" and "how" questions in non-directional language to convey an open and emerging design. In the illustrative study, I stated the following research questions to guide the study (see Cobbold, 2010, p. 8):

1. What is the degree of articulation between policy and practice with respect to teacher retention?
 - (a) What policies are developed at the national level to retain teachers?
 - (b) How are national policies for retaining teachers implemented?
2. How do basic school teachers describe their perception of retention policies?
 - (a) How do basic school teachers perceive the ideals and implementation of retention policies?
3. What are the particular concerns (professional, social and personal) of basic school teachers and to what extent are these addressed by retention policies?
4. What has been the impact of retention policies on the career intentions of teachers?

Reflecting later on the relevance of, and justification for, these questions, I wrote:

With respect to the kind of questions I sought to answer, the focus was on the process of policy implementation, the correspondence between stated and implemented policies...I needed detailed information about retention policies; I wanted to understand policy makers, implementers and teachers' perceptions of the policies and how their perceptions can affect intended outcomes....In particular, I asked *what* and *how* questions so that I could explore and describe what was going on....Furthermore, I wanted to "emphasize the researcher's role as an active learner who can tell the story from the participants' view rather than as an "expert" who passes judgment on participants" (Cobbold, 2010, p. 99).

No doubt, the study topic called for an in-depth exploration which could hardly be achieved using quantitative methods. The need to present such a detailed view of the topic would not have been sufficiently accomplished through a "wide-angle lens" or a "distant panoramic shot" (Creswell, 1998, p. 17).

7. Data Collection Procedures

Qualitative researchers use a variety of data collection techniques, including formal and informal interviews, participant and non-participant observations, focus group discussions or interviews, open-ended questionnaire, artifact and document analysis, and stimulated recall using videotaped classes. How these methods are to be employed in theory differs from how researchers actually employ them in practice (Tang, 2000). In the illustrative study I used a combination of data gathering methods – documents, interviews, focus group and open-ended questionnaire. Before describing how these methods were used, I present a brief description of the participants and how they were selected.

7.1 Selection of Participants

In order to explore how national policies for retaining teachers were implemented, and the perceptions of

teachers about those policies and their implementation, I collected data from two main groups of participants – Ghana Education Service (GES) officials selected from the national headquarters, regional and district offices, and teachers from different locations of the country. There were three categories of teachers:

- *in-service teachers* – certified basic school teachers who were pursuing further studies in a university;
- *rural teachers* – basic school teachers teaching in deprived areas in one district; and
- *former teachers* – basic school teachers who had left basic school teaching after obtaining degree qualifications.

7.2 Sampling Techniques

In selecting the participants, I applied a mix of purposive sampling techniques. According to Patton (2002, pp. 230-246) purposeful sampling strategies can be used in interpretive research to select “information-rich cases...from which one can learn a great deal about issues of central importance to the purpose of the inquiry” (p. 230). He discusses fifteen such strategies, six of which - homogeneous, maximum variation, typical, critical, judgmental, and snowball sampling – I adopted at various stages of the study to select sites and a cross section of people engaged, at different levels, in teacher education policy making and implementation to participate in the study.

The GES officials were chosen because of their various positions within the teacher education sector and different amount of involvement in the formulation and implementation of teacher education policies. The in-service teachers and rural teachers were selected through homogeneous sampling because members in each group had similar backgrounds and experiences. Besides, they were the people most affected by the issues of the study (Patton, 2002); that is, they are the groups of teachers typically known for leaving (basic school) teaching in Ghana, and who are, generally, the objects of retention policies. Their homogeneity also facilitated and suited their participation in the focus group interviews. In the case of the in-service teachers, maximum variation sampling was applied as additional criterion to select those who participated in the focus group, in an effort to include males and females; teaching experience in all the 10 regions of the country; the different education courses they were studying in the university; those who had indicated intention to leave teaching after their courses and those who intended to stay; and first to fourth (final) year students. The former teachers were selected through a snowball sampling technique. The involvement of these participants resulted in the sharing of a range of insights and perceptions based on the participants’ different positions within the teacher education sector and different amount of involvement in the formulation and implementation of teacher education policies.

Though I used purposive sampling techniques to select the participants, it was “the point of redundancy” or data saturation that determined the actual number which ultimately participated. That is, the sample was terminated when no new information was forthcoming from new sampled units (Lincoln & Guba, 1985, p. 202).

7.3 Documents

Lincoln and Guba (1985) articulate a number of advantages in utilizing document analysis as a research tool. Where available, documents constitute a stable source of information that accurately reflects situations that occurred at some time in the past. Documents can be scrutinized over time without the presence of the researcher altering their content, and are seen as rich source of information, grounded in the context and natural language of the setting they represent. Yin (2003, p.87) also recommends the use of documents to “corroborate and augment evidence from other sources,” explaining that they provide detail not available from other sources, for example, interviews with participants.

In the illustrative study, I collected official documents, memoranda and circulars relevant to teacher retention, from the national headquarters of the MOE and GES. I scrutinized these documents to identify the ‘official perspective’ on the topic under investigation, and key issues around which the interview questions were structured. Despite their general limitation of describing “what is said rather than what is done” (Harber, 1997, p. 114), the documents provided insights into the theoretical underpinnings behind teacher retention policies and practices, and illuminated the socio-cultural, economic and political context from which research participants’ responses were analyzed. Finally, the documentation helped me verify and strengthen data from the interviews (Stake, 1995), and provided valuable corroboration of anecdotal remarks that were made by some research participants. Apart from the official documents mentioned, I also relied on the findings of recent empirical research, and newspapers as these provide realistic insights into situation on the ground as opposed to what official documents and government representatives allege to be happening (Harber, 1997).

7.4 Interviews

Collecting data through interviews is so popular among qualitative researchers that interviews are considered as

“the gold standard of qualitative research” (Silverman, 2000, pp. 291-292). Interviews enable researchers to access the perspectives of respondents, who are allowed to freely express their thoughts around particular topics (Bogdan & Biklen, 2003). When combined with documents, interviews with key participants help researchers gain a more in-depth understanding of the thinking that lay behind the documents, the influences of different individuals and the contradictory interests of different participants (Taylor, 2002).

Along a continuum, different forms of interviews may be staggered: the structured, semi-structured and the unstructured. In the illustrated study, I used two sets of semi-structured interview. One set, designed for MOE/GES officers, focused on how various policies for retaining teachers were developed and were being implemented; including any problems they faced in the implementation of specific policies. The second was meant for former teachers, and probed, essentially, their reasons for leaving basic school teaching, and what might attract them back.

The semi-structured nature of the interviews made it possible for me to change the sequence and forms of questions in order to follow up the answers given and the stories told by the interviewees. This flexibility enabled me to develop insights on how MOE/GES officers interpreted official policies on teacher retention, and how former teachers felt about basic school teaching as compared to their current occupations. It also enabled me “to discover the unexpected and uncover the unknown” (Gerson & Horowitz, 2002).

I initially planned to make audio recordings of each interview, with the consent of interviewees. I believed this would make me get a full and accurate record of the interview, and facilitate the process of making sense of what respondents might say. Furthermore, I thought that details which might not appear significant at the time of the interview and therefore not written down, could easily be retrieved, should they become important as the research evolves (Merriam, 1998). My plans did not all go through. Some officers of the MOE/GES did not consent to tape-recording of our conversations. In all cases, however, I took notes during each interview using my own personal shorthand, which resulted in a near-verbatim account of the session.

7.5 Questionnaire

Questionnaires are commonly associated with quantitative studies. However, Patton (2002) acknowledges the relevance of open-ended responses on questionnaires in qualitative research. He points out that such responses constitute the most basic form of qualitative data by which one can understand the world as seen by respondents. In particular, they “enable the researcher to understand and capture the points of view of other people without predetermining those points of view through prior selection of questionnaire categories” (p. 21). Following this thinking, I used a questionnaire, primarily open-ended, as the first stage of collecting a nationally representative data from the in-service teachers. Apart from basic demographic data (e.g. sex, age, teaching experience, and course of study), the questionnaire sought the in-service teachers’ awareness and perceptions of retention policies, their future career intentions, and their suggestions for retaining graduate teachers in basic school teaching. Despite the limitations of the written responses, in that some of them were not extended and could not be probed for further details from specific respondents, I found them helpful in my choice and focusing of questions, and selection of respondents, for the focus groups.

7.6 Focus Group Discussion

I used the focus group technique to elicit from in-service teachers and rural teachers what their particular concerns about a career in teaching were, their perceptions of existing retention policies and strategies, and what alternative policies and strategies they thought would enlist their long-term commitment to basic school teaching. Responses to the questionnaire, such as in-service teachers’ intention to stay in or leave basic school teaching, were also probed further.

By using focus groups to stimulate talk from multiple perspectives from the group members, I was able to learn what the range of views on the issues explored were (Bogdan & Biklen, 2003; Morgan, 1996; Morgan & Krueger, 1993). The technique also provided some quality control on the data collection through participants providing checks and balances on each other. This, to a large extent, helped to weed out false or extreme views, making it “fairly easy to assess the extent to which there is a relatively consistent, shared view... among the participants” (Patton, 2002, p. 335-336). An added benefit that derives from group members reacting to and building upon each other’s responses is that “corrections [made] by the group concerning views that are not correct, not socially shared or extreme are available as means for validating statements and views” (Flick, 2002, p. 114).

7.7 Data Analysis

Qualitative data analysis is described as “messy” in that it is not a linear process. Rather, it is a multi-layered

process that continually builds upon itself until a meaningful and verifiable interpretation is achieved. The messiness of the interconnections, inconsistencies and apparently illogical input reaped in qualitative research demand that researchers embrace the tangles of their data from many sources. The analytical process is therefore inductive. Qualitative researchers do not search out data or evidence to prove or disprove hypotheses they hold before entering the field; rather, they analyze their outcomes from the inside out, organizing and deriving meaning from the data by way of the data itself. The abstractions are built as the particulars that have been gathered are grouped together. Once data is collected and summarized, the researcher looks for relationships among the categories and patterns that suggest generalizations, models and conclusions. Theory developed this way emerges from the bottom-up (rather than from the top-down), from many disparate pieces of collected evidence that are interconnected. This is called grounded theory (Glaser & Strauss, 1967).

In the illustrative study, data collection and analysis occurred concurrently, commencing “with the first interview [conducted and] the first document read” (Merriam, 1998, p.151), through a process of reduction, display and verification (Miles and Huberman, 1994). Firstly, I transcribed the taped interviews and focus group discussions, and reviewed my field-notes. I then analyzed data from these sources and those from the documents vertically and horizontally (Kelchtermans, Vandenberghe & Schratz, 1994) ‘by hand.’ The vertical analysis focused on the transcripts of each individual interview and focus group discussion to determine the “internal coherence and consistency of the individual [interviewee’s and group’s] story” (Kelchtermans, 1993, p.445), and to identify categories of data. In the horizontal analysis, I compared categories across the data from the interviews, focus group discussions and documents. Through coding and category-building processes, similar to those outlined by Bogdan and Biklen (2003); Flick (2002); Merriam (1998); Miles and Huberman (1994); Wester and Peters (2000) and Yin (2003), I identified emergent themes. By “theme” I mean threads of meaning that either run throughout much of the data, or appeared less regularly, but carried considerable emotional impact (Ely, Vinz, Downing, & Anzul, 1997). These were refined and challenged until distinct categories developed and conclusions emerged.

The process of comparing units of data to look for recurring patterns was systematic, and was guided by the purpose of the study as well as the knowledge and the meanings made explicit by the respondents. I was alert to the fact that names assigned to the various themes should be exhaustive, mutually exclusive, sensitizing, and conceptually congruent (Merriam, 1998, p.184). I was also particularly attentive to Miles and Huberman’s (1994) advice to complete the coding of one set of data before re-entering the field to collect more.

In sum, employing the techniques of sorting and classifying, coding, category-building, data display with accurate record keeping, I reviewed and summarized the responses from interviews and focus group discussions, data gathered from documents, and my field-notes. I then sought categories of meanings, repeated patterns, salient themes, and built up explanations. As far as possible, I made the effort to attend to all evidence, address the research questions as well as all major rival interpretations.

8. Trustworthiness of Results

Knowledge generated through qualitative methods is sometimes viewed with scepticism. The concerns which underlie this state of doubt derive from a perceived lack of representativeness of the (usually small) sample used in qualitative studies and an alleged lack of rigor in the collection, analysis and interpretation of the data. “This [supposed] lack of rigor is linked to the problem of bias...introduced by the subjectivity of the researcher” (Hamel, 1993, p.23). Put differently, the concerns involve how issues of internal validity, external validity, reliability and objectivity – the canons of quality in post-positivist research – are addressed in qualitative studies.

Lincoln and Guba (1985) argue that the way these standards are addressed in qualitative research is different from how they are met in quantitative studies. They formulate the “naturalist’s equivalents” of internal validity, external validity, reliability and objectivity as credibility, transferability, dependability, and confirmability respectively, and also added authenticity as another criterion. These constructs establish the “truth value” of qualitative study, its applicability, consistency, and neutrality, and bestows on it a unique form of precision and believability.

8.1 Credibility

The credibility construct is the qualitative parallel of internal validity in post-positivist research. It relates to the extent of correspondence between participants’ actual view points and how these have been portrayed by the researcher. Research strategies that can be used to enhance credibility include prolonged and sustained engagement in the field, persistent observation, peer debriefing, negative case analysis, progressive subjectivity, member checks and triangulation (Mertens, 2005).

Throughout the illustrative study, I engaged in extended discussions with colleagues, of the research questions, data analysis, findings and conclusions. During the data collection, I also made efforts to verify with participants the constructions that were emerging. For example, at the end of each interview and focus group, I summarized what had been said and allowed participants to ascertain whether the summary accurately reflected their position. Interview transcripts and notes were also given to some participants for their comments. Thus, the two techniques of peer debriefing and member checking, helped to probe my own views, explore meanings, clarify the basis for interpretation (Lincoln & Guba, 1999) and enhanced my ability to represent the views of the participants accurately. Furthermore, the different persons (teachers, education policy makers and implementers) from whom I collected data, and the various methods used – interviews, focus groups, documents and questionnaire – provided data and methodological triangulation (Denzin, 1989) and added “rigor, breadth, complexity, richness, and depth to [the] inquiry” (Denzin & Lincoln, 2003, p. 8).

8.2 Transferability

Transferability is the qualitative equivalent of external validity in post-positivist research and, therefore, the analogous metric of generalizability in quantitative studies. Transferability addresses the issue of whether the findings of a study hold up beyond the specific research subjects and the setting involved. Most qualitative researchers are not concerned with the question of generalizability as defined above. Those who may be concerned with generalizability, may draw upon other studies to establish the representativeness of what they have found, or they may conduct a larger number of less intense mini-studies to show the non-idiosyncratic nature of their own work. In general, qualitative researchers are more interested in deriving universal statements of general social processes than statements of commonality between similar settings. Here, the assumption is that human behavior is not random or idiosyncratic. Therefore, qualitative researchers concern themselves not with the question of whether their findings are generalizable, but rather with the question of to which other settings and subjects they are generalizable. This was also my position in the illustrative study:

In terms of transferability, it must be noted that it was not my prime objective to generalize the findings of the study to other settings or groups of people. In qualitative research, “the burden of demonstrating the applicability of one set of findings to another context rests more with the researcher who would make that transfer than with the original researcher” (Marshall & Rossman, 1999, p. 193). The researcher or reader who wants to take this second decision span in generalizing...needs to determine the degree of similarity between the study context and the receiving context (Cobbold, 2010, p. 111).

To facilitate this, I provided “thick description” (Geertz, 1973) of the context of the study, people from whom data was collected and the basis for selecting them. In addition, I stated the theoretical parameters that guided the data collection, analysis and interpretation. These strategic choices, combined with the triangulation of the multiple sources of data and data-gathering methods used in the study should enhance the usefulness of the findings to others in similar situations, with similar research questions or questions of practice (Marshall & Rossman, 1999).

8.3 Dependability

Dependability is the qualitative parallel to reliability, which means stability over time in the post-positivist paradigm. It speaks to the issue of whether a study’s findings would be replicated if it were conducted with the same participants in the same context. Dependability is gained through consistency of data, which is evaluated through transparent research steps and research findings. To facilitate this, it is important that a dependability audit is conducted “to attest to the quality and appropriateness of the inquiry process” (Mertens, 2005, p. 257).

The interpretive assumption of a socially constructed reality, which underpinned the illustrative study, challenges the notion of stability over time as implied by reliability in post-positivism, making the concept of replication itself problematic. Nevertheless, I carefully documented decisions made in the course of the study to facilitate dependability audit (Lincoln & Guba, 1985) of the research process. Finally, in reporting on the data, I differentiated primary evidence from secondary, and description from interpretation, and also included negative instances or rival interpretation (Sturman, 1999; Yin, 2003).

8.4 Confirmability

Confirmability parallels objectivity in quantitative research. Objectivity means that the influence of the researcher’s judgment is minimized. Confirmability means that the data and their interpretation are not figments of the researcher’s imagination. Rather, the data can be tracked to its original sources, the logic that is used to interpret the data is made explicit, and the process of synthesizing data to reach conclusions can be confirmed

(Mertens, 2005). Again, this is facilitated through a confirmability audit which can be conducted in conjunction with the dependability audit. The researcher's peers can review field notes and interview transcripts to determine if a study's conclusions are supported by the data.

As indicated earlier, in the illustrative study I engaged in extended discussions with colleagues, who helped review my field notes, interview and focus group transcripts, the research questions, data analysis, findings and conclusions. Interview transcripts and notes were also given to some participants for their comments.

8.5 Authenticity

Authenticity is the requirement that the researcher presents a balanced view of all perspectives, values and beliefs (Lincoln & Guba, 2003). It answers the question, "Has the researcher been fair in presenting views?" According to Lincoln and Guba, three important criteria for judging the authenticity of a study are:

- *fairness* – different constructions and their underlying value structures were solicited and honored in the process; the researcher identified the respondents and how information about their constructions was obtained; recommendations and agenda for action were openly negotiated.
- *ontological authenticity* – how the individual's or group's conscious experiences of the world became more informed or sophisticated.
- *catalytic authenticity* – the extent to which action is stimulated by the inquiry process. This can be determined by respondents' testimony and examination of actions reported in follow-up studies.

In summary, the different forms of methodological controls built into the design of the study, especially the triangulation of sources and methods, accounted for the validity and reliability of the results and ensured their trustworthiness, for as Flick (2002) observes, triangulation is less a method of validation than an alternative to validation of results.

9. The Researcher's Role

In qualitative studies, the researcher as the instrument for data collection, analysis and interpretation, engages in different levels of interaction with participants. The voice of the researcher is heard in the presentation of the research report, as shown by the use of the first person singular, "I", throughout this paper. The presence of the researcher in the lives of the participants presents a range of strategic, ethical and personal issues that are not associated with quantitative studies (Locke, Spirduso & Silverman, 2000). Marshall and Rossman (1999) classify the issues into the *technical*, that is, those that address access to research sites and participants as well as efficiency in terms of researcher role; and the *interpersonal* – issues that encapsulate the ethical and personal choices that arise during the conduct of the study. The authors further note that the two groups of considerations overlap and have mutual implications. Within the qualitative research community, the call has been urgent and incessant that researchers identify and discuss their 'role,' which frames up the above issues, for this is fundamental to the paradigm and a criterion for assessing the credibility of the study and its findings (Creswell, 2003; Marshall and Rossman 1999; Mertens, 2005; Patton, 2002).

In the illustrative study, I recounted my experiences as a teacher, teacher educator and researcher with a long standing interest in the work and life of teachers generally and teacher retention issues particularly. I also indicated my ontological and epistemological stance which identifies with the qualitative research paradigm. Suffice to state here that I also engaged with issues of access, involvement and reciprocity. The details of these are reserved for another paper, for want of space in this paper.

10. Conclusion

In this paper, I have drawn on my personal experience to discuss and illustrate the nature of qualitative research and some of its characteristics. In doing so, I have tried to step back from the stance of researcher dispassion (Fine, Weis, Weseen & Wong, 2003) to take the reader through methodological issues that confront qualitative researchers and how the issues are addressed. I find that the qualitative researcher is not a mere technician who just follows predetermined procedures but a professional who must carefully think through the research process and take decisions consistent with a clearly defined methodological posture. I also find that learning by doing and attention to intellectual and technical rigor, and professional integrity are important in qualitative inquiry.

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